REMARKS:

The courtesies extended to the undersigned by Examiner Stefan Kruer during the personal interview held May 13, 2010, are acknowledged and appreciated. As discussed during the interview, applicants, their principal representatives in Germany, and the undersigned have carefully reviewed the non-final Office Action of February 19, 2010, in the subject U.S. patent application, together with the prior art cited and relied on in the rejection of the claims. The claims have again been amended in a further effort to more clearly patentably define the subject invention over the prior art cited and relied on, taken either singly or in combination. Reexamination and reconsideration of the application and allowance of the claims is respectfully requested.

As discussed with Examiner Kruer, the first motor 21, which is located at the web receiving area, applies a torque to the threading belt 06. That torque is applied to act as a brake or a retarding force on the speed of the threading belt 06 to thereby counteract the speed at which the motor 11, which is located in the web delivery area, pulls the belt 06 and its attached material web, through the printing press. In the published PCT application WO2005/075197, the motor is described as being operated with "...eines konstanten Rückhaltemomentes, betrieben wird.". That phrase appears at page 4, lines 4 and 5 of the first full paragraph of the published PCT application. That phrase was translated, at page 4, line 5 of the first complete paragraph, as "...a constant retaining torque". That language was carried over into paragraph 017 of the substitute specification unchanged. While the term "retaining" is not incorrect, it may not be the most accurate term in this application. The German phrase "Rückhaltmoment" is a torque for braking. It is literally translated as a "holdback torque". The terms "holdback"

or "resisting" are believed to more aptly convey the meaning of the term, in the context of the subject application. As discussed with Examiner Kruer, the substitute specification is being amended. The newly added terms are used in the currently amended claims. The amending of the specification is believed to provide proper antecedent basis for their use.

In the course of the interview, the operation of the subject invention was discussed. As may be seen in Fig. 1, as is disclosed generally in the Substitute Specification, principally at paragraph 017, and as set forth in the current amended claims, a material web leading end is led through a printing unit 02 of a printing press or web processing machine 01 from a web receiving area, adjacent a reel changer 03, to a web delivery area after the printing unit 02. A web threading device, such as a belt 06, is used to thread the web leading end through a printing press. A torque controlled motor 21 is located at the web receiving area and a speed controlled motor 11 is located at the web delivery area. These motors are operated so that the belt 06 and the web leading end that is attached to it, will be pulled through the printing press at a selected speed and with a constant web tension. It is important to be able to thread up the printing machine at a high rate of speed. It is equally important to be able to do so while maintaining a constant tension in the web of material. If the web is either too loose or has too much tension, the threading will not be accomplished properly.

As disclosed in the subject application and as recited even more clearly in the currently pending claims, the first belt threading motor is torque controlled. It applies a regulated holdback torque to the material web through the threading belt. That holdback torque is used for resisting movement of the web in the web threading

operation. At the same time the first motor is applying its holdback torque, the second motor in the web delivery area is operating to pull the threading belt and the web leading end through the printing press at a selected speed. Since it is desirable to accomplish the web feeding in a short period of time, the speed is selected to be quite high. If the first motor did not exert its resisting holdback torque, the web could be pulled through the press too quickly. If the first motor exerts too much of a resisting or holdback torque, the web may tear. The control of the torque of the first motor and of the speed of the second motor ensure that the web, which is attached to the threading belt, is pulled through the machine at a selected speed, with a constant tension, and is not apt to tear.

In the Office Action of February 19, 2010, claims 27, 29-36, 39-45 and 49-52 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent No. 7,243,827 to Lehrieder in view of JP 63-235240 to Kenichi and further in view of U.S. patent No. 3,586,221 to Rosen. It was asserted, in the discussion of the Lehrieder reference, that among other features, that it shows a first web threading motor 17 at the web receiving area and a second web threading motor, also 17, at the web delivery area, relying on column 4, lines 32-34. It was further asserted that the first motor was torque regulated and that the second motor was speed regulated. The undersigned respectfully disagrees.

In the Lehrieder patent, No. 7,243,827, there is shown a web draw-in device. A draw-in mechanism 12 is pulled by a motor 17 that rotates a reel body 13 or by a similar motor 17 that drives rollers 14. Both the reel body 13 and the rollers 14 are located after, in the direction of web travel, the printing units 02 and 03. In operation, the draw-

in mechanism, which may be a steel tape, is extended out of the reel body by the rotation of either motor 17 in a direction that is the reverse of the web lead-in direction. The tape 12 is fed back to one of several roll changers 04, 06 or 07. Once the web leading end has been attached to the tape 12, that tape is pulled into the reel body, by operation of either motor 17 driving the reel body or by the operation of motor 17 driving the rollers 13 and by the motor 17 driving the reel body.

When the motor 17 is rotating only the reel body, it can provide either a constant draw-in speed or a constant web draw-in force. If the motor 17 is used to turn the rollers 14, it can again provide either a constant draw-in speed or a constant or preselectable moment. See column 4, lines 5 and 6. In this second preferred embodiment, the motor 17, that drive the reel body 13, is not controlled in the way it was controlled in the first embodiment. See column 3, lines 65-67.

In the embodiment described briefly at column 4, lines 31-38, it is recited that the control of the motor 17, which is clearly described as being located at the web delivery area, can be controlled in accordance with the first embodiment; i.e., either speed or moment controlled. It is further recited that the draw-in device can be rewound from a reel body, which is not represented, in the area of the roll changers 04, 06, 07.

It must be noted at this point that there is no teaching or discussion of any motor associated with the reel body which is located in the area of the reel changers. The clear language of column 4, lines 32-38 of the Lehrieder reference does not support the Examiner's discussion of the reference. Since there is no teaching in the Lehrieder reference of any motor at the web receiving area; i.e., at the roll changers 04, 06 and 07, that non-existent motor could not be controlled at a predetermined motor torque.

The Examiner's discussion of the Lehrieder reference is not supported by the clear language of the document.

The secondary reference to Kenichi, JP 63-235240, was asserted as showing a web receiving area 10 and a web delivery area 13. The Examiner has reversed the terminology because, in the subject invention, the web receiving area is before the printing unit 02 and the web delivery area is after the printing unit. In the Kenichi device, it appears that a rope 12 is unwound off a downstream reel drum 13 and onto an upstream reel drum 19. The rope 12 travels from left to right in Fig. 1 of the reference. A specified drive torque is inputted from a drive torque setter 24 to a voltage regulator 25 which sends an output voltage to the upstream side drive motor 19 for accomplishing a positive direction rotation. At the same time, a brake torque is inputted from a brake torque setter 20 to a voltage regulator 21. An output voltage is applied to the motor 18 which drives the downstream side motor 18. It is very clear that Kenichi uses two torque controlled motors.

The Examiner has stated, in the Detailed Action, at page 4, lines 6-8, that "...Kenichi teaches operating his first motor (identified previously as 19) operated at a regulated motor torque and his second motor (identified previously as 18) at a regulated motor speed". That statement is not correct. Kenichi very clearly states that "...a stabilized sheet passing..." is performed "...by employing both a brake torque setter (20) and a drive torque setter (24)".

The combination of Lehrieder and Kenichi advocated by the Examiner fails to find support in the teachings of the references. As discussed above, Lehrieder shows two motors 17, both located after the printing unit and in the web delivery area. Either motor

could be one of torque controlled or speed controlled. However, as disclosed with Lehrieder's second preferred embodiment, if the motor 17 that drives the rollers is used in either a torque controlled mode or in a speed controlled mode, the motor 17 that drives the reel body 13 is not controlled in either of those modes. Lehrieder does not teach the use of a motor for driving the reel body which may be located in the area of the roll changers 04, 06, 07. Since Kenichi clearly describes that both of his motors are torque regulated, it is not understood how the Examiner can state that the teachings of Kenichi would allow one to modify the Lehrieder device to regulate non-existent first and second motors in accordance with torque and speed. If the motor 17 of Lehrieder, which is used to drive the rollers 14, is claimed as one of either torque or speed control motors, the other motor 17, which is also located on the web delivery area is not controlled with respect to either torque or speed.

The other secondary reference to Rosen, U.S. patent No. 3,586,221, was cited in the Office Action of February 19, 2010, as disclosing two motors for a welding wire feed device and wherein both of these motors had different strengths. The language regarding relative motor strengths has now been removed from the claims pending in the subject application. It was previously added by the undersigned who has since determined that it was inaccurate and did not find support in the specification.

During the interview of May 13, 2010, a substantial amount of time was spent discussing the Rosen reference and in attempting, by Examiner Kruer, to assert that it is analogous to a web threading device in a printing press. The undersigned continues to assert that it is not analogous art. In Rosen, a welding wire W is fed from a supply reel 10 to a welding gun 12. A driving roll 16, which is located near the supply reel 10, is

driven by what is referred to as a push motor. Since the wire W has some structural rigidity, it can be "pushed" toward the gun 12 by the push motor. That push motor is recited as being much stronger, such as having a higher power rating for handling the major portion of the wire feed load. The push motor, which is located near the wire reel 10 then exerts a push on the wire to advance it along to the welding gun 12.

A smaller pull motor is situated near the gun. It is preferably integrated with the welding gun unit and is of comparatively low power rating. Note the description at the bottom of column 2 of the Rosen reference. Since it is of low power rating, while the push motor, positioned near the reel 10 is of a "...much higher power rating.." (see column 3, lines 3-6), it is very clear that the push motor is the one which is primarily responsible for pulling the welding wire off the reel 10 and for advancing it to the welding gun 12. As described at column 1, lines 20 of Rosen, the small pull motor is used to establish and to maintain a wire feed rate. The push motor is used to prevent a build-up of excessive wire-pull tension and to draw from the reel no more wire than is called for by the pull motor. The push motor is slaved to the pull motor. The feed controlled pull motor is "...controlled according to compared signals representing the velocity and load torque respectively of the pull motor, and the selected wire speed or velocity reference" (see column 1, lines 70-73). The resultant signal represents variations of the actual wire speed from a reference wire speed. The resultant signal is then used to control the "...application of speed regulating power to the pull motor...". The pull motor controls the speed at which the wire is fed into the welding gun, where it is consumed. The push motor has the task of insuring that the wire is removed from the reel 10 and is available to be pulled by the smaller pull motor at a required feed rate.

It is not the purpose of the push motor to apply a braking torque to the wire in response to an excessive wire travel speed caused by the pull motor. Note the discussion at the bottom of column 2 of the Rosen patent and specifically at lines 66-72. The pull motor establishes and maintains a selected rate of wire speed. The push motor is used to remove the wire from the reel 10 and to make it available to the pull motor so that the pull motor can feed it at the desired feed rate. The two motors operate in a combined manner to balance the wire feed load between the two motors.

In the subject application, as recited in currently amended claim 27, the web threading belt is used to receive a leading end of a material web. The web threading belt is pulled by its motor in a direction of web travel and at a selected web travel speed from a web receiving area to a web delivery area. In the web receiving area, the speed of the web threading belt is controlled by the application of a resisting or a holdback torque to the web threading belt. This is not similar to the Rosen operation. In Rosen, the large push motor removes the wire from the reel and makes it available at a rate dictated by the smaller pull motor located at the welding gun. The push motor of Rosen does not act to restart or to resist the pulling of the wire by the pull motor. Instead, it operates to provide the correct amount of wire for the pull motor to pull so that the pull motor can operate at its desired speed and wire tension. Rosen's push motor does not apply a regulated holdback torque to the wire that it feeds to the welding gun.

In the subject application, as set forth in currently amended claims 27 and 43, the motor at the web receiving area is torque controlled to act as a brake on the web threading belt. The imposition of a resisting or a holdback force on the web threading belt results in the application of a constant tension in the material web, whose leading

end is attached to the belt. None of the prior art references cited and relied on, taken either singly or in combination, operate in this method, using such a device. Claims 27 and 43, as currently pending, are thus believed to be patentable over the prior art cited and relied on.

All of the rest of the claims that are pending in the subject application are dependent on either independent claim 27 or independent claim 43, as amended. Those claims are also thus believed to be allowable.

The patent to Fischer, No. 3,854,676, was cited in the Office Action of February 19, 2010, but was not relied on in the rejections of the claims. No discussion thereof is believed to be required.

SUMMARY:

The Substitute Specification has been amended to revise the translation of a term used in the PCT application and to provide proper antecedent basis for the use of that term in the claims as currently amended. This change in the Substitute Specification does not add any new matter, as was discussed with Examiner Kruer during the interview held May 13, 2010.

Independent claims 27 and 43, as well as various ones of the dependent claims, have been amended. It is believed that the claims now pending in the subject application are patentable over the prior art, taken either singly or in combination. Allowance of the claims, and passage of the application to issue, is respectfully requested.

Respectfully Submitted,

Wolfgang FISCHER et al.
Applicants

JONES, TULLAR & COOPER, P.C.
Attorneys for Applicants

Douglas R. Hanscom
Reg. No. 26,600

May 19, 2010

JONES, TULLAR & COOPER, P.C.
Customer No. 23294
P.O. Box 2266 Eads Station
Arlington, Virginia 22202
Phone: (703) 415-1500
Fax: (703) 415-1508
E-mail: mail@jonestullarcooper.com

Attorney Docket: W1.2278PCT-US